1951.

File No. Pt XV 2004/36

P.W. DEPARTMENT

A CLASS ~~K~~ BRANCH

N

Subject:— Gr:I Scheme

Jog Karnatak ~~Theatre~~

Miscellaneous Matters.

A (1)

1/1

File No. Pt ~~XV~~ 2004/36 K.

Old. Secty. 25-B—2814

No. S.34/7385-A,
Development Department,
Bombay Castle, 6th October 1949.

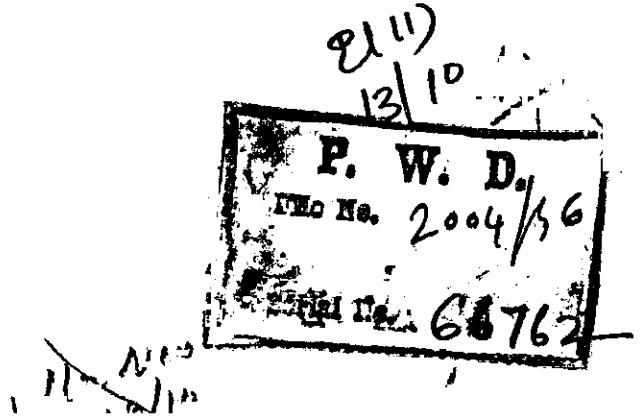
To

The Assistant Secretary to the Government of Bombay,
Public Works Department.

I am direted to forward herewith a copy of report on Industrialization of Bombay Karnatak and Utilization of Jog Power for information.

S. H. Varia,
Assiant Secretary to the Government of Bomy, Development Department.

MGK.6/10.


P. W. D.
No. 2004/36
No. 64762

El. Br. (I) P. W. D.

The development Deptt. has forwarded for the inform. of Govt. a copy. of the report on Industrialisation of Bombay Karnatak and utilization of Jog Power. A similar copy of the same report was already rec'd. in February last from the E. & I. Deptt. (now Dev. Deptt.).

* Kept below

The remarks of the El. Commr. on Chapter XXVI of the Report, giving summary of various recommendations, were forwarded to the E. & I. D. as per G.E. No. 2004/36-El., d. the 18-4-49. Govt. has since issued a press note, showing the action taken by Govt. re: the utilization of Jog Power — vide p. 231 of file No. 2004/36-V.

No further action seems necy. on the present reference which may be recorded.

29-11-49.

DS.

KJ 30/11/49

File 30/11

@ p 155 of file No. 2004/36-V (not 1/2)

§ File 2004/36-V p 179

Δ - do - p 231

Note No. 1

JOG-KARNATAK ELECTRIC GRID SCHEME.

A short note on the desirability of withdrawing indents for Transmission Line materials from the Director General of Industries & Supplies.

I requested the Director General of Industries and Supplies to invite tenders for 110 kV transmission line materials on 27-7-1950 and for 33 & 11 kV line materials on 11-8-50. While addressing him I had specifically mentioned that it is essential to have the materials by August - September 1951 at site. These dates were fixed so that the Jog - Karnatak Electric Grid Scheme may be executed according to the programme submitted to Government along with the Project Report (Copy enclosed for ready reference). The approximate costs of the materials are about Rs. 34 lakhs for 110 kV line materials and about Rs. 12.5 lakhs for 33 and 11 kV line materials. The Director General of Industries and Supplies practically did not take any action till 26.10.1950 when he advertised our demands. The specification issued by Director General of Industries and Supplies are exactly as supplied by us to him. The final due date for the receipt of tenders by the Director General of Industries and Supplies is 18-12-1950.

According to the programme submitted to Government the orders for 110 kV line materials are to be placed by 1.1.51 and for 33 and 11 kV line materials by 1.2.51. These will now be impossible with the present rate at which the Director General of Industries and Supplies is handling over indents. Considering the experience we had with the Director General of Industries and Supplies in connection with the order for the substation equipment for the scheme, he may take some months after the receipt of tenders to order the materials for us and consequently the execution of the scheme will be delayed to that extent.

Since the order for the sub-station equipment is already placed with the International General Electric Co. of America whose delivery period is about 12 months, it is now all the more important that we should order the line materials without any delay if the transmission lines are to be completed by the time the sub-stations are ready. This will be possible only if we order the materials direct without the agency of the Director General...

General of Industries and Supplies as soon as we are able to examine and select the most suitable offers after the tenders are received.

Under the circumstances explained above it is absolutely necessary for us to withdraw our indents from the Director General of Industries and Supplies and also to request him to direct the prospective tenderers to submit their tenders direct to this office. I have already addressed Government in this connection vide my letter No.T.8/S-3/29296 dated 7-12-1950. (copy enclosed.)

...

isb/9.12.

C O P Y.

Immediate.
Letter.

No.T.8/S-3/29296
Electric Grid Offices,
Mercantile Bank Building,
Fort, Bombay 1 : 7th December, 1950.

To

The Secretary to Government,
Public Works Department,
Bombay.

Sub:- Jog-Karnatak Electric Grid Scheme -
Purchase of 110, 33 and 11 kV line materials.

Ref:- i) Government Letter No.2004/36-El(I) dated 26-9-1950.
ii) This office No.T.8/S-3/24033 dated 10-10-50 (Copy endorsed to Government).
iii) Government letter 2004/36-El(I) dated 23-11-50.

When I requested Government to authorise me to place indents for 110, 33 and 11 kV line materials, (Government has now agreed to my request vide reference (i) and (iii) above), I had not before me Government letter in the Development Department No.41/25111-F dated 14-9-50. In this letter Government has stated that it has no objection to the procedure of indenting through the Director General of Industries & Supplies, being waived in all suitable cases of purchases of special items like Power Plant etc. provided the patronage to Indian Shipping and Indian Insurance is ensured and conditions regarding training of Indians are attached to the supply contracts.

2. My experience with the Director General of Industries & Supplies regarding his handling of my enquiries has been far from satisfactory. It has been found to be necessary for us to advise the Director General of Industries & Supplies at every stage to get satisfactory results. This and the other procedure adopted by him have resulted in delays in the supply of materials and therefore the execution of the schemes. I feel that we may experience similar difficulty and delay in this case as in connection with the ordering of substation equipment for the Jog-Karnatak Electric Grid Scheme.

3. So far as the transmission line materials are concerned, the Director General of Industries & Supplies has not done any work for us except issuing our own copies of the specifications and drawings. The last date for tendering has been fixed by him as 18-12-1950.

4. It is highly desirable in order to avoid further delays in

in the execution of the scheme, that we withdraw our indent for 110 kV line materials already sent to the Director General of Industries & Supplies vide reference (ii) mentioned above, and request him to inform all the prospective tenderers to submit their tenders for 110, 33 and 11 kV line materials direct to this office on the due date. The formal indent for 33 and 11 kV line materials has not yet been sent to the Director General of Industries and Supplies. By doing this we will not only save the purchase commission payable to the Director General of Industries & Supplies but also a lot of delay and inconvenience.

5. Hence I request Government to authorise me to withdraw the indent for 110 kV line materials already sent to the Director General of Industries & Supplies and also to request him to instruct the prospective tenderers to submit the tenders already called by him direct to this office. I will have just enough time to write to the Director General of Industries & Supplies if I get Government authorization within about a week. At the same time, I would like to have the permission of Government to order the materials direct from this office in consultation with Government where necessary.

Sd/- P.B. Advani

Electrical Commissioner
with the Government of Bombay.

C/-
9/12/50.

Note No. 2

CHOLA 2ND EXTENSIONS

Correspondence regarding grant of Import Licence.

1. Boilers:

An application for import licence was made by Messrs. Kamani Engineering Corporation Ltd. to the Chief Controller of Imports (H.E.P.) in their letter No.EHA/PP/25716 dated 29th November 1950. The application and the covering letter were sent to the Chairman Central Electricity Commission by the firm requesting him to forward the same to Chief Controller of Imports (H.E.P.) with his recommendation for early issue of the Import licence.

p 11
Enclosure A.

The Electrical Commissioner also addressed a letter No.Elg.414(A)/28741 dated 1st December'50 to the Chairman, Central Electricity Commission with a copy of the application for import licence by the firm requesting him to ensure that the import licence is granted within one month from the date of application. If this is not done, the guaranteed delivery & erection time will have to be extended which must be avoided at all costs.

2. Turbo-Alternator Sets:

p 13
Enclosure B.

Letter No.Elg.414(B)/24518 dated 14th October 1950 was written by Electrical Commissioner to the Chairman, Central Electricity Commission enclosing a copy of the import licence application of Messrs. Protos Engineering Co.Ltd. requesting him to forward the same to the Chief Controller of Imports with necessary recommendations as early as possible.

HBK/9.XI.50.

Note No. 2

9.

CHOLA 2ND EXTENSIONS

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P. 11
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P 13
Enclosure B.

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HBK/9.XI.50.

Enclosure - A

Immediate.

No.Elg.414(A)/28741
Electric Grid Offices,
Mercantile Bank Building, Fort,
Bombay 1: 1st ~~November~~ December 1950

To

The Chairman,
Central Electricity Commission,
'Cleremont', The Mall, Simla .

Subject :- Chola Power Station-Second Extension
Import licence for 4 x 150,000 lbs per hour water tube boilers and auxiliary equipment.

Dear Sir,

This is to invite reference to my letter No.Elg414(I 24518 dated 14th October 1950 along with which I forwarded an appli-cation for import licence for 3 x 18000 kw. Turbo sets switchgea etc. for the above extension. The order for the boilers, Coal and ash handling plant etc. has been now finalised with Messrs.Kamni Engineering Corporation the manufacturers of the plant being Messrs Nagasaki Shipyard and Engine Works, West Japan Heavy Industries Ltd., Nagasaki, Japan. The firm has made out an application for import licnce in their name a copy of which is enclosed therewith original having been forwarded to you direct. I shall be obliged if you will please forward the same to the Chief Controller of Imports (H.E.P.) with neessary recommendations as soon as possible.

2. The delivery and the commissioning of the plant has been guaranteed against penalty in such a way that the power statio can be put into operation within 23 months from the date of order. According to the conditions of contract theabove stipulation holds good, provided the import licence is granted within one month of placing order i.e. before 29th December, 1950. For any delay beyon one month in granting the import licence the firm is to get corres-ponding extension in the commissioning period of 23 months. As you are very well aware, any delay in commissioning the plant will seriously affect, production and make labour situation difficult.

3. Under the circumstances stated above I shall be obliged if you will kindly ensure that the import licence is grante within one month of this application. I shall be much obliged for an early action in the matter.

Yours faithfully,

Electrical Commissioner
with the Government of Bombay.

PGP.8.XII.

Copy forwarded with compliments to Secy. to Govt.P.W.D.

Enclosure-B.

17 13

No.Elg.454(B)/24518
Electric Grid Offices,
Mercantile Bank Building,
Bombay 1:· 14th October 1950.

To

The Central Electricity Commission,
Cleremont, The Mall,
Simla.

Subject:- Chola Power Station-
Second Extension-Import Licence for
3 x 18000 Kw. sets switchgear etc.

Dear Sir,

As you are already aware the Government of Bombay has decided to install 3 x 18000 kw sets as an extension to the present power station of G.I.P.Railway at Chola to relieve the acute power shortage in the Bombay area. The order for the equipment name-ly 3 x 18000 kw sets switchgear etc has been finalised with Messrs. Siemens Schukert of Germany through their representatives Messrs. Protos Engineering Co.Ltd. of Bombay. The firm has made out an aplication for import licence in their name, which is being enclosed herewith, with a request to forward the same to the Chief Controller of Imports with necessary recommendations. The delivery of the plant has been guaranteed in such a way that the power station can be put into operation within 24 months from the date of order. Under the circumstances, it is essential that the import licence should be granted without any loss of time. I shall be much obliged for an early action in the matter.

Yours faithfully,

Electrical Commissioner
with the Government of Bombay.

Copy to Messrs. Protos Engineering Co.Ltd.,
72 Medows Street, Fort, Bombay.

PGP.8.XII.

Immediate.

ELECTRIC GRID OFFICES.

As desired by H.M.,P.W.D. I place below two notes on (1) Jog - Karnatak Transmission and Distribution Lines and (2) Licenses for Chola Power House plant, for further disposal during H. M.'s visit to New Delhi on the 11th instant.

H.M.,P.W.D.,
Bombay.

U.O.R. No.T.8/S.3/ 29565
Bombay 1: 9th December 1950.

isb/.9.12.

P. W. D.
File No. ~~1254/48~~ 2004/36
Serial No. ~~29~~ 102956

2004/36
102986

Fr 20

El. Br (I). Nos 1-3 & 9 P.W.D. P 15

These are notes which were handed by the H. Commr Designate to the H.M. P.W.D. for disposal during his latest visit to Delhi on the 11th Dec 1950.

2. Note No 1 :— Nos 1-3 The question regd: the withdrawal of indents for the transmission materials for Jog schema from the Dir Genl of Supplies & Disposals has been dealt with separately and the relevant file is under U.O. No. 2504/36 99787 to the H. Commr for furnishing certain information regd by the H.M.

3. Note No 2 : Nos 4 to 9 Deals with the grant of import licenses regd by Messrs

2004/3c

102956

Kamani Engineering Corpn &
Messrs Parlos Engineering Cy. for boilers
and Turbo. alternator sets respectively.
Messrs Kamani Engineering Corpn
have since recd the import
licence. It is not however
known whether the Parlos
Engineering Cy. Ltd have also
recd the import licence required
by them. The Head Commr
may be requested to
check-up the position so that
the S.P.O. may be written
in the matter if necessary.

5/1/57

KJ 6/1/57.

D.S.
✓
Mr. M.O. to Head Commr 8.1.57

ELECTRICAL COMMISSIONER WITH
THE GOVERNMENT OF BOMBAY
Inward No. 987
1011

5(D+S)

Below U.O.R. P.W.D. No.2004/36/102956 dated 9-1-1951.

.....

Electric Grid Offices.

Messrs.Protos Engineering Co.Ltd. have since received the necessary Import Licence for three 18,000 kW Turbo Alternator sets, switchgear, etc., for Chola Power House Extension. Therefore it is not necessary to address the Government of India in the matter.

The Secy. to Govt.,
P.W.D., Bombay.

U.O.R. No. T.8/6-3/ 2142

Bombay,1. 20 January 1951.

DPD.19/1/51

2004/36

7030

El. Br. (I)

P. W. D.

Submitted for info, with ref to para 3 of the O.N., dt. the 6-1-51.

Record.

25-1-51.

Kfs 27/1/51 D. S.

Sd (I) 22/1

P. W. D.
Serial No. 2004/36
7030

GHOSH & CO.
C/o Postmaster,
Hubli, Dt. Dharwar.

27th Sept. 1950.

To

The Electrical Commissioner with the
Government of Bombay, Foreshore Road,
Bombay 1.

Dear Sir,

Subject :- Jog-Karnatak Transmission Line Surveys.

Reference:- Mileage rate for reconnaissance work.

We beg to submit an application hereby for revision and re-adjustment of the component mileage rates for reconnaissance and detailed survey work, within the limits of the accepted overall rates, our grounds for doing so being as stated below.

In this connection we would request you in the first instance to refer to, and scrutinise, once again the following papers, which taken together, practically constitute our contract :-

1. Your specifications No. T.8/E-1/15910 dated 28-9-49
2. Our Tender dated 10-10-49 based on the above specifications.
3. Our letter dated 22-11-49 embodying revisions and modifications to the above specifications.
4. Your letter No.T.8/C-1/53 dated 25-1-50 accepting our tender dated 10-10-49 subject to the conditions mentioned in 1,2 and 3 as above.

We beg to point out that in none of the above papers there were any specifications whatsoever about reconnaissance work. In the absence of such specifications our agreeing to accept the mileage rate of reconnaissance work as per para 9 of our letter dated 22-11-49 was influenced by the presumption that the object of the reconnaissance would be merely to lay down a rough location for the final alignment within certain limits of error, after giving due consideration to avoidance of natural and manmade obstacles, sharp deviation angles and tortuousness of the line, in so far as such factors prevented fulfilment of the conditions as under para 6 of your specifications No.T.8/E-1/15910 dated 28-9-50. In fact the usually accepted connotation of the word reconnaissance, in so far as relates to engineering projects, is a cursory examination of the tract of the country for the purpose in hand. But later on we found that your requirements regarding reconnaissance far exceeded its limits and functions as presupposed by us, and that you

attached practically considered it more important than and that you- the detailed survey itself. In course of our work we found that you attached great importance to our walking exactly over the line as marked on the map and even to carefully anticipate the tower positions during the reconnaissance. We had in fact no idea that we would have to undertake to the reconnaissance in such detail and with so much accuracy when we quoted the mileage rate.

We have, however, carried out, and will carry out all verbal instructions of the supervising officers regarding reconaissance work faithfully and obediently and without demur, though there no written specifications. But we regret that we find we have already incurred considerable loss in reconnaissance work, which may or may not be made up by the detailed survey. It seems to us that we shall be always on the deficit side, at the reconnaissance stage, by spending more than we get. We would request you therefore to consider our difficulties and to revise the reconnaissance rates, as we are concerned with at present, as follows :-

1. Rs 375/- per mile instead of Rs. 70/- for 110 kV lines in forested areas
2. Rs.245/- per mile, instead of Rs.70/- for 110 kV lines in semi-forest areas.
3. Rs. 100/- per mile, instead of Rs. 50/- for 33 kV lines in open areas.

We are of opinion that the reconnaissance work easily represents 50 % of the total work, if not more. Under the circumstances, we would request you to carefully consider all the facts as stated above, and facilitate our work, by granting our reasonable request.

Thanking you,

We remain,

Yours faithfully,

Ghosh & Co.
SD/ xxx

1. Copy forwarded to the Executive Engineer(Civil) Electric Grid Dept.Nadiad for his information.
2. Copy forwarded to the Assistant Engineer (Civil) Electric Grid Dept.,Hubli for his information.

ISB/1.12.

Urgent.

Copy.

Egdn/No.4418 of 50.
Nadiad 16 Nov.50.

To:-

The Superintending Engineer (Trans.)
Electric Grid Offices,
Mercantile Bank Building,
Fort, Bombay .1.

Subject :- Jog Karnatak Grid Scheme.

Reference :- Correspondence resting with this office letter No.5859/50 dated 17th Oct.50.

In continuation of my letter quoted above I have to state that the question of increased rate for reconnoissance work was discussed with M/s Ghosh & Co's representative Shri Ghosh during my recent visit to that area. The rates quoted by M/s Ghosh & Co., for reconnoissance work are very high and can not be accepted. I am however convinced that the rate of Rs.70 per mile as originally agreed to for 110 kV Line reconnoissance is rather low as M/s Ghosh & Co., had not taken into consideration the fact that it would be necessary to clear atleast a small strip in Forest area before reconnoitered route could be approved. I therefore reco mend that a flat rate of Rs.175/- per mile for 110 kV. reconnoissance in Forest areas (as a part payment against their rates for survey) may be approved as it would not be possible to measure the exact Mileage of Forest and Semi-forest areas at this stage. No revision of rates appears necessary for open areas in 110 kV line as well as for 33 kV Lines.

Shri. Ghosh has been informed by me that the rates now quoted by

Sd/-
Executive Engineer(Civil)
Electric Grid Division Nadiad
Nadiad.

ISB/30.11.

T.6/C-1 20004
Electric Grid Offices,
Mercantile Bank Building, Fort,
Bombay 1: Nov. 1950.

1-12

To

M/s Ghosh & Co.,
C/o Postmaster,
Hubli.

Subject :- Jog Karnatak Transmission Line Surveys.
Revision of mileage rate for reconnaissance

Reference:- Your application dated 27-9-1950.

Dear Sirs,

Your application for a revision of the rates for reconnaissance surveys within the limits of the accepted overall rates for the complete work has been examined and in due consideration of the fact that there will be some extra work involved during reconnaissance in Forest and Semi-forest areas than in open areas, you will be paid advance at the rate of Rs.230 per mile of reconnaissance in Forest areas and Rs. 160 per mile in semi-forest areas instead of Rs.70/- per mile agreed originally by you. These rates are about one third of the total survey rates. No revision of rates of advance payment can be allowed for open areas of 110 kV line and for areas of 33 kV line (which lie in open areas only). The revised rates of advance payment will apply for work done after the receipt of this letter.

Yours faithfully,

Superintending Engineer
(Transmission)
for Electrical Commissioner with
the Government of Bombay.

ISB/30.11.

✓ Copy forwarded with compliments to the Secretary to Government P.W.D., Bombay with reference to Government Letter No.2004/36-El(I) dated 31-12-1950 for information. A copy of the application of M/s Ghosh and Co. dated 27-9-50 is enclosed wherein they have explained why they request enhanced advance payments. The Executive Engineer (civil), Nadiad made a field investigation and was satisfied that an enhanced rate of advance was necessary for reconnaissance work in Forest and Semi-forest areas only (as per his letter No. 6418 dated 16-11-50 copy enclosed) due to extra work like jungle clearing to be carried out in those areas even for reconnaissance. Hence enhanced rates of advance payment have been approved. It is hoped that this will expedite the survey work.

AE for D. 7.1.51

2004/36
98591

P. W. D.

El.Br.(I).

Submitted.

2. In G.L. No.2004/36-El(I), dated the 31-12-49, the Elecl. Commr. has been authorised to accept the tender of Messrs. Ghosh & Co. for the surgey of transmission lines for Jog-Karnatak Grid Scheme at an estimated cost of Rs.98,000/- and on the terms of payments mentioned in para. 4 of the Elecl. Commr.'s letter at p.136 of file No.2004/36-VIII put up below. A general rate of Rs.70 per mile was agreed as part payment for 110 KV line reconnaisance. On the request of the contractor for the revision of the above rate, the Elecl. Commr. is satisfied that an enhanced rate for reconnaisance work is necy. He has informed Govt. that he has agreed to pay the contractor at the rate of Rs.230/- per mile for reconnaisance in forest areas and Rs.160/- per mile in semi-forest areas in advance. No idea is given as to what extent this enhancement of rate will affect the estimated cost of the survey work and whether Govt. approval is required. He may be requested u.o. to elucidate the point.

OFFICE OF THE
REGIONAL COMMISSIONER WITH
GOVERNMENT OF BOMBAY
Ward No. 5'9
Date 2/1/51

GJP.
28/12/50

28/12/50

KJ 28/12/50

U.S. to Elect Commr. of 30.12.50

SE(T)
30/12

Below U.O.R. P.W.D. No.2004/36/98591 dated 30-12-50.

Electric Grid Offices.

The enhanced rates for reconnaissance affect only the initial part payment; the overall rates for the complete work remain unaltered as is made clear in the letter to the contractor(No.T.8/C-1/28804 dated 1-12-50 page 5 ante). Hence the estimated cost of Rs. 1,41,475 for surveys approved in G.R. P.W.D. No.2004/36 dated 28-11-1950 remains unaltered.

for E.C.

The Secy.to Govt.,
P.W.D., Bombay,

U.O.R. No.T.8/C-1/784

Bombay;1. 9 January 1951.

DPD.8/1/51

2004/26
2862

P. W.D.

El. (Br (I)

Submitted with refer. to the O.N. at p. 7 ante.

2. It will be seen from the El. Comm's Note at p. 7 ante that the enhanced rates of part payment now agreed to by the El. Comm. do not affect the overall rates for the Complete work. According to the original agreement the part payment for the work was to be made at the rates of Rs. 70 and 50 per mile in forest areas in respect of 110 K.V lines and 33 KV lines respectively. These rates of part payment, in advance, have been enhanced to Rs. 230 and Rs 160 respectively. This increase in the rate of part payment does not affect the estimated cost of Rs. 1,41,476- for survey sanctioned under G.R. No. 2004/26 dt 28-11-50. No further sanction is necessary as the three Govts. Resns.

D.S.

Ks 21-2-51

4/4/51

REPORT ON SAVANUR ELECTRIC SUPPLY.(14/15-10-50).

M.V. Pant Vaidya, M.I.E.

The Savanur electric supply was visited and inspected by me on the 14th and 15th of October 1950 and the following are my observations and suggestions regarding its future.

1. The system of this supply is a D.C. 230 volts system, the supply is given to about 230 consumers for only lighting purposes. The power house has only one 230 V D.C. 2-wire generator driven by a Ruston Horizontal 35 B.P.H. engine. The engine is suppose to run at 325 r.p.m., but actually it was showing a speed of only 275 r.p.m. at a maximum load of 17 to 18 KW on the generator. The generation voltage was 210 at peak load time. The engine appears to have been looked after fairly well but there is a considerable wear on the liner which is causing a heavy leak of gasses; consequently the engine cannot run to its full speed and take its normal load.

2. Only one feeder is taken out and the size of this is No.2 s.w.g. As the supply voltagae 230 volts, this feeder has to carry a current of 90 to 100 amps. when the voltage falls down to 200 at the peak load time. Hence to improve the Supply voltage out side, an additional No.2 size feeder may be required.

3. The above observation will show that it will not be ecomimical to extend the existing supply any further bewause :-

(1) The power house plant is incapable of carrying even its present demand load at a satisfactory voltage.
(2) Since an A.C. supply from the Jog Falls Power House is expected in a year or two , it would be a waste of money to install any further 230 volts D.C. plant eigher at the Power House or by the Consumers for motive power purpuses.

Hence I would advise that :-

(1) There is no need to run separate street light wires.
(2) No additions to the power house plant need be made at this stage and no further new connections should be allowed for the time being.
(3) The liner and the piston of the ruston should be repaired; if a liner is not available, the existing liner should be re-board and a new piston be made to suit the larger bore of the liner. With these repairs the eigine should be able to carry on its load in a much better condition.
(4) The aerial lines should be repaired now in such a way that they will be suitable for the future A.C. supply to come.
(Details of the construction and estimates are given below.:-)

4. The Electric Inspector to the Govt. has made out quite a large number of recommendations for the improvements to the lines in order to bring them into a proper and legal order according to the Govt. Electricity Rules. There is no doubt that the lines are quite in disorder and repairs and improvements are absolutely necessary both in order to satisfy the rules as well to public safety and economy. Taking all the various points into consideration I give below a programme and estimates for the costs of the changes requi ed and also a plan so that the whole system may be changed over to A.C. at a minimum cost , when such supply becomes available.

REPAIRS PROGRAMME.

5. The Municipality should purchase and collect the

the following materials and keep them ready before starting on any repiars. etc.
When these are on spot a either a contractor or a Qualified engineer may be employed to carry out the work according to the instructions I give below and the methods of construction for which I am supplying the drawing herewith.

BCD Tubular steel 30 ft. long poles		40.
H.D. Bare Copper wires.:-	No. 4 s.w.g.	10 cwt.
	" 6 " "	10 "
	" 8 " "	5 "
	" 10 " "	5 "
Galvanised steel wires,	No. 10 s.w.g.	5 "
3" M.S.Channal.		150 ft.
2"X2" M.S.Angles.		100. Ft.
Porcelain pin Insulators with pins.,	3.5"x6"	4 Doz.
	2.5"x4"	6 "
Porcelain Shackle Insulators, with straps and bolts..	4"x4" ..	2 "
	3"x3.5" ..	1 Doz.
	2"x2.5"	8 Doz.
M.S. Round bars, 5/8" and 3/4" sizes, each		2 cwt.
Bolts nuts. etc..		

Cement and other small materials are supposed to be available as and when required at the time of actual construction.

6. When all these materials are gathered on spot the construction may be taken in hand as follows.

(1) First lay a feeder line from the Power House to the junction of Bankapur Road, with poles at approximate intervals of 165 Ft. The poles used should be all BCD tubular poles (16 poles . The first pole at the Power House should b e a H-pole.)
(2) The existing 2 No.2 s.w.g. conductor should then be shifted on to these poles.
(3) About 15 steel poles may be distributed on Bankapur and provincial roads. There are some 19 old tubular poles also useful for such distribution.
(4) On Bankapur road 3-No.4 conductors and 2 No.8 conductors may be run and the existing No.2 s.w.g. conductor should be recovered and then run on the main Rashidabad road line to duplicate the existing line feeder. Thus there will be ultimately 4- No.2 size conductors on the main line from the Power House to Rd.Jn. Until the time the 230 V D.C. supply is there, these 4 conductors will serve as two separate feeders; when changed over to A.C. this will be one 400/230 V, 3-phase 4-wire feeder.

(5) Branch lines may then be carried on partly tubular and partly by using some of the old serviceable poles. The 4" girders will not be suitable for running any mains both as they are weak and else short. About 8 or 10 of these(24 Ft. long)may be retained and the rest disposed off. I have given below a table for remodelling the lines. In the re-modelled condition as below, the lines shall be ready for a change over to an A.C. when available.

Road.	Steel poles	Conductor-s to be used. Size. No. 2	4.	6.	8.	10swg.
1. P.House to Bankapur Rd.	1-H pole					
2. P.House to Khadarbg	14 single		4	.	3	.
3. Jn.of Rashidabad Rd. &	10 "		3	.	1	.
Provincial Rd. on both	5 "		.	3	1	1
sides, each about	5 "		.	3	1	1
4. Bankapur Rd.west,	10		3	.	1	1
5. " " East,	5		3	.	1	1

Note 1. Remaining lines should be at present run as they are but be repaired to accord with El.Inspectorss recommendations.

Note 2. 3 conductors of No.8 used on main feeder Rashidabad Rd. from P.House to Bankapur Jn. are for street lights and to be laid as 3 phase lines with neutral common with feeder (fourth No.2 conductor) when A.C. supply will be switched on. Till that time these may not be required.

Note 3. No. 10 s.w.g. is used for street lights in branch circuits, with common neutral.

Note 4. It is recommended that Khandar bag feeder may also be laid simultaneously now and supply to the ward 4 area may be connected from Khadar bag end even now. This will relieve the main feeder and give a better pressure in this area .

CONCLUSIONS.

1. As the 230 v system is uneconomical, no spare plant of this voltage be purchased but the Govt. should be requested to expedite with their construction to supply A.C. to Savanur.

2. The Ruston Engine set should be serviceable for 2 or 3 years to maintain the present supply when due repairs to it as well as the mians as planned above are carried out.

3. Only if, the Govt. A.C. supply is to be delayed for long or --- indefinitely, there will be a justification for the Municipality to extend its Power House plant. But in that case only one 50KW A.C. set may be ordered and the present generator be replaced with an A.C. x 20 KW set.

ESTIMATES.:

40 steel poles, BCD 30 Ft. long	Rs. 5000
1.5 tons of copper wire as per details above...	" 6500
Insulators, steel angles, G.I.wires etc. and small materials..	" 3000
Labour @ Rs. 600/- per mile for 5 miles...	" 3000
Repairs to the existing engine and plant such as replacement of liner and pistons etc.	" 2000
	Rs.19500/-

"TRUE COPY.

Sd. M.V.PantVaidya, BSC. A.M.I.E.
M.I.E. CONSULTING ENGINEER.

Sub:- Jog falls Electric supply..

....

No. ELC.S.R. 358/1715 of 51.
Savanur Municipality,
Dated:- 23-1-1951.

To,

The Electrical Engineer to Govt. P.W.D.
BOMBAY.

Sir,

The Consulting Engineer in his report on the Savanur Municipal Electric supply has remarked that the D.C. 230 volts system will not be economical and may be changed to A.C.400/230 V.3- phase 4 wire,50 cycle system and the conversion to this system will also facilitate its connection to Jog falls and if the Govt. scheme is delayed, he recommends some additions to the Power House by the Municipality. A copy of the report of the Consulting Engineer, after inspecting the Power House is however, herewith enclosed for perusal. I therefore request you to let me know whether the supply of electricity from Jog Falls is expected in this area in a year or two..

An early reply is requested.

Yours faithfully,

Sd. H.A.Patil.
Administrator,
Savanur Municipality.

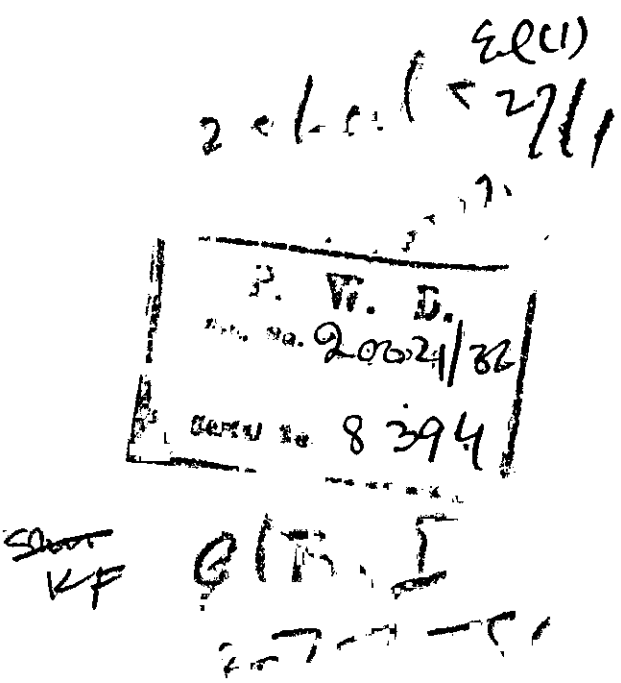
....

Copy submitted to :-

(1) The Asstt: Engineer (Commercial) for the electrical Commissioner (Grid Offices,) Bombay.

(2) Under Secretary to the Govt. of Bombay Public works Department,Bombay Castle,(Bombay No.1.)

Administrator, S.M.


P. W. D.
No. 20024/82
Serial No. 8394

Sp 7

1024/36

8394

Pl. Br (I)

P.WD.

Submitted. 1/5

2. The communication is addressed to the Chief Engr. to Govt. who is to give the necessary reply. No action is req. on the part of this office

Record.

6/2/57

KJ 6/2/57

File 6/2.

DS

Subject: SUPPLY OF ELECTRICITY FROM JOGA-FALLS.
HALIYAL TOWN .....

***

No. 650 of 1950-51
Municipal office,
Haliyal, 8th December, 1950.

(Dictt:- N. Kamara)

To

The Minister,
For Public Works & Housing,
Bombay.

Sir,

This was handed over to H.M. Reg at Khanapur during the tour on 11th Dec 1950.

It is reliably under-stood that the Scheme for carrying Electricity from Dandeli to Hubli via Kavalwad (a village in the Haliyal Taluka) has been sanctioned by the Government of Bombay and the area through which the electrical line will pass has also been got surveyed by Government Engineers. Although the nearest point on this main line from where electric supply can be diverted to Haliyal is at a distance of only seven miles from the Haliyal Municipal limits, it is a matter of for regret that the Government should entirely ignore the interest of the Haliyal Town and its ommision from the above project of electric supply is highly deplored.

enquiries may be held immediately so that the detailed survey now in progress may not be over before any final decision is taken. The public interest requires that some early way of raising a loan for export

Haliyal is a prospering town with a population of ten thousand. Within the Municipal limits there are three big rice mills, six flour mills, two cinema theatres now under construction and many other home industries such as pottery which all put to-gether may consume about 100 K.Ws. of electricity. The town area is approximately three square miles and the total length of the Municipal roads is nine miles. About 200 K.Ws. would be required for the purpose of municipal street lighting and use by residents for lighting and other domestic purposes.

With a veiw to preventing the chronic scarcity of water for which this place is notorious a Scheme for supplying pipe water from Nagazeri Tank was prepared in 1924 but the idea had to be inevitably dropped since there were then no sufficient funds at the disposal of the Municipality to finance this Sche-

Since it is the obligatory duty of the Municipality to provide essential amenities of human life the Municipality has under its serious consideration a proposal for constructing a reservoir on Shool-Mardi ~~from~~ from which pipe water can be supplied to the residents. The highest spot on this Shool-Mardi is favourably situated at a hight of 200 ft. from the town level and is at a distance of only half a furlong from the said perennial ~~of~~ source of water supply (Nagazeri Tank). This water-supply-Scheme can materialize only if the water from the Nagazeri Tank could be pumped up by the force of the electricity into a reservoir now proposed ~~to~~ to be constructed on the Shool-Mardi, and ~~highly~~ the height secured here, will ensure gravity flow of water to every part of the town.

Haliyal abounds in rich paddy fields and forest produces such as timber and the supply of electricity to this area will undoubtedly encourage artifical irrigation on a mass scale and thus, in addition to assisting the Government in its present "Grow More Food Campaign" will induce many of the enterprising to start fresh industries such as saw mills and carpentary work-shops etc. Six thickly populated villages each one of which has a population of more than 2000 and lying within a radius of two miles from the Haliyal Municipal limits will also simultaneously derive the above benefits arising from the supply of electricity.

So far all the purposes mentioned above about 1000 K.W of electricity would be required and the Government will be definatly at an advantage in as much as considarable amount in the form of electric charges will unceasingly flow in to their pockets In short by supplying electricity to Haliyal the Government will be serving the double purpose of benefitting the residents of Haliyal and the adjoining area on the one hand and itself on the other.

I therefore on behalf of the Municipality request that Haliyal may please be included in the above project of electric supply and necessary orders for carrying the current to this town

and for surveying the area along which required electric line may be erected, may please be issued early and this office informed in the matter.

Yours faithfully,

Administrator,
Kaliyal Municipality.

Copy submitted with respects to:-

1. Chief Secretary to the Government of Bombay.
2. Parliamentary Secretary to the Minister for Revenue.
3. The Collector of Kanara, Karwar.
4. The Secretary, P.W.D. Bombay.

44.

Subject: SUPPLY OF ELECTRICITY FROM JOGA FALLS.
HALIYAL TOWN .....

No. 650 of 1950-51
Municipal office,
Haliyal, 8th December, 1950.
(dist:- N. Kanara)

To

The Minister,
For Public Works & Housing,
Bombay.

Sir,

It is reliably under-stood that the Scheme for carrying Electricity from Dandeli to Hubli via Kavalwad (a village in the Haliyal Taluka) has been sanctioned by the Government of Bombay and the area through which the electrical line will pass has also been got surveyed by Government Engineers. Although the nearest point on this main line from where electric supply can be diverted to Haliyal is at a distance of only seven miles from the Haliyal Municipal limits, it is a matter of for regret that the Government should entirely ignore the interest of the Haliyal Town and its ommision from the above project of electric supply is highly deplored.

Haliyal is a prospering town with a population of ten thousand. Within the Municipal limits there are three big rice mills, six flour mills, two cinema theatres now under construction and many other home industries such as pottery which all put to-gether may consume about 100 K.Ws. of electricity. The town area is approximately three square miles and the total length of the Municipal roads is nine miles. About 200 K.Ws. would be required for the purpose of municipal street lighting and use by residents for lighting and other domestic purposes.

With a veiw to preventing the chronic scarcity of water for which this place is notorious a Scheme for supplying pipe water from Nagazeri Tank was prepared in 1924 but the idea had to be inevitably dropped since there were then no sufficient funds at the disposal of the Municipality to finance this scheme.

Since it is the obligatory duty of the Municipality to provide essential amenities of human life the Municipality has under its serious consideration a proposal for constructing a reservoir on Shool-Mardi from which pipe water can be supplied to the residents. The highest spot on this Shool-Mardi is favourably situate at a hight of 200 ft. from the town level and is at a distance of only half a furlong from the said perennial source of water supply (Nagazeri Tank). This water-supply Scheme can materialize only if the water from the Nagazeri Tank could be pumped up by the force of the electricity into a reservoir now proposed to be constructed on the Shool-Mardi, and height secured here, will ensure gravity flow of water to every part of the town.

Haliyal abounds in rich paddy fields and forest produces such as timber and the supply of electricity to this area will undoubtedly encourage artifical irrigation on a mass scale and in addition to assisting the Government in its present "Grow More Food Campaign" will induce many of the enterprising to start fresh industries such as saw mills and carpentary work-shops etc. Six thickly populated villages each one of which has a population of more than 2000 and lying within a radius of two miles from the Haliyal Municipal limits will also simultaneously derive the above benefits arising from the supply of electricity.

So far all the purposes mentioned above about 500 K.W. of electricity would be required and the Government will be definatly at an advantage in as much as considarable amount in the form of electric charges will unceasingly flow in to their pockets. In short by supplying electricity to Haliyal the Government will be serving the double purpose of benefitting the residents of Haliyal and the adjoining area on the one hand and itself on the other.

I therefore on behalf of Municipality request that Haliyal may please be included in the above project of electric supply and necessary orders for carrying the current to this town

and for surveying the area along which required electric line may be erected, may please be issued early and this office informed in the matter.

Yours faithfully,

Administrator,
Kaliyal Municipality.

espects to:-

1. Chief Secretary to the Government of Bombay.
2. Parliamentary Secretary to the Minister for Revenue.
3. The Collector of Kanara, Karwar.
4. The Secretary, P.W.D. Bombay.

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cipality has under its serious considaration a proposal for
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Shool-Mardi is favourably situate at a hight of 200 ft. from
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the said perennial source of water supply (Nagazeri Tank). This
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produces such as timber and the supply of electricity to this
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enterprising to start fresh industries such as saw mills and
carpentary workshops etc. Six thickly populated villages each
one of which has a population of more than 2000 and lying with-
in a radius of two miles from the Haliyal Municipal~~ity~~ limits,
will ~~xxx~~ also simultaneously derive the above benefits arising
from the supply of electricity.

So far all the purpose mentioned above about 500 K
of electricity would be required and the Government will be de
nately at an advantage in as much as considerable amount in the
form of electric charges will unceasingly flow in to their poc
ets. In short by supplying electicity to Haliyal the Governmen
will be serving the double purpose of benefitting the resident
of Haliyal and the adjoining area on the one hand and itself o
the other.

We, ~~therefore~~ the residents of Haliyal therefore
request that Haliyal may please be included in the above proj
of ~~xxxxxxxxx~~ electric supply and necessary orders for carr
the current to this town and for surveying the area along wh
the required electric line may be erected may please be is

early and ~~kkk~~ we informed in the matter.

Yours faithfully,—

~~Bd~~/- V.D.Deshpande.
F.N.Hallikeri.
Ramsing Doulatsing.
R.M.Giri.
K.R.Phadnis.
& Other Citizens of Haliyal.

Copy submitted with respect to:-

1. Chief Secretary to the Government of Bombay.

2. Parliamentary Secretary to the Minister for Revenue.

3. The Collector of Kanara, Karwar.

4. The Secretary, P.W.D. Bombay.

~~19~~ 2004|36|102775

El. Bor. (I). P.W.D.

Submitted.

2. The papers may be referred u.o. to Elect. Commr. for report with reference to the orders of P.S. to H.M. PWD.

27/1/50

21/1/50

Secy

DAS

Secy

to El. Commr. 23-12-50

5144 28/12

OFFICE OF THE ELECTRICAL COMMISSIONER WITH THE GOVERNMENT OF BOMBAY
Inward No. 23515
Date

27/12

Copy U.C.R. P.W.D. No.2004/36/40775
dated 2-12-1950.

Electric Grid Offices.

Haliyal is a taluka town about 12 miles from Dandeli. From the information contained in the letter of the Municipal Administrator, Haliyal, its development may be considered similar to that of Haveri, which has been included in the Jog-Karnatak Electric Grid Scheme. An 11 kV single circuit line from Dardeli to Haliyal(similar to Byadgi-Haveri line) and an 11 kV substation at Haliyal (similar to Haveri substation) will be necessary to supply the power requirements of this town. It is therefore not necessary to divert the proposed route of the main 110 kV line to Dandeli.

8. All the power available from the Mysore Government has already been allocated. If, however, any of the industries proposed for Dandeli do not materialise, or if the Mysore Government agrees to allot more power, supply to Haliyal town from Dandeli sub-station as proposed in para 1 above may be considered, but the extension will naturally increase the capital cost of the Scheme and is not covered in the project report. The additional cost of the 11 kV line, sub station, etc. will be of the order of Rs. 4,00,000, and that of the distribution system in the town itself of the order of Rs. 2,90,000.

for E.C. 14/1/51

The Secy. to Govt.,
P.W.D., Bombay,

U.C.R. No. T.8/3/ 1246

Bombay 1 12 January 1951.

DFD.12/1/51

2004/36
4046.

El. Br.(I). P. W. DEPTT.

The report of the Elecl. Commr. is submitted with reference to P. S. orders at p. ante.

2. It will be seen from the Elecl. Commr.'s report that supply to Haliyal town from Dandeli can be given if the Mysore Govt. agrees to allot more power or if any of the industries proposed for Dandeli do not materialise, but, even if Govt. decides to give the power, an additional expenditure of 8 lakhs will be incurred. Owing to financial stringency the scheme is out of the question at present. The applicants may be replied to as per draft put up for approval.

CKW
25/1/51.

25/1/51

D.S.

Sec.,

P.S. to H.M.

H.St.

No. 2004/36-EI.(I).

Public Works Department,
Bombay Castle (Bombay No.1),
7th ~~January~~ Feb 1951;

To

The Administrator
Haliyal Municipality,
Haliyal.

Subject:- Electric supply to Haliyal.

Dear Sir,

I am directed to refer to your letter No.650, dated the 8/12/1950, addressed to the Honourable Minister for Public Works and to state that it is regretted that no power can, at present, be spared for Haliyal. The question will be considered at a later stage. When more power is available from the Mysore Govt. or if any of the industries proposed for Dandeli do not materialise.

Yours faithfully,

Deputy Secretary to the Government of Bombay,
Public Works Department.

D.A.- Nil.

CKW
25/1/51.

Copy forwarded for inform. to the Asst. Comm. with the G.of B. with reference to his No T.83/3/1246, dt. the 12/1/1951.

25/1/51

ISSUED
9/2/51

2004/38/95781

P.W.D.

El. Br I

Sub! –

• Utilization of Jog Power/ Purchase of 33/11 K.V. line materials.

The papers mentioned in the margin were referred w.o. to the El. Comm. with the Govt. of Bihar on 18-12-95. As they have not been received back, their office memo enforwarded under no. 2004/96, dt. Dec. 1995 Jan. 1996

30/12/95.

1st proof 17.2.11

21/11/17

Papers received

File 17/2

C.-3.

71

INDIAN POSTS AND TELEGRAPHS DEPARTMENT

Received here at ____ H. ____ M.

6178

EX TI .IE.. DELHI 12 STE 25 BOMWORKS BOMBAY-

SUPERINTENDING ENGINEER VAIDYA SHOULD REACH HERE WEDNESDAY

FOURTEENTH WITH TENDERS FOR 110 KV TRANSMISSION LINE JOB

KARNATAK SCHEME- JIVRAJ MEHTA-

Received 12 13 3

The sequence of entries at the beginning of this telegram is—class of telegram, time handed in, serial number (in the case of foreign telegrams only), office of origin, date, service instructions (if any) and number of words.

This form must accompany any enquiry respecting this telegram.

MGIPPAh.-

72

I informed the C.E. Electric
[illegible] He told me
that Shri Vaidya has already
left for Delhi last night by
Meerut express and will be
back on the 14th next morning.
Tenders for 110 KV. Line have been
already sent by post to the
D.C. & S. and Shri Vaidya has
gone back on the suggestion of
the D.C. & S. to personally
to explain the position personally

OFFICE OF THE
ELECTRICAL COMMISSIONER WITH
THE GOVERNMENT OF BOMBAY
Inward No. 7075
Date 13/3

1312
13/3

El:(I)
13/3

P. W. D.
2004/36
2208

13/3

ER I

Kundali

Kf. 13/3/57

Secy
13-3-57 (for [illegible])

13.

Below P.W.D., U.O.R.,No.2004/36/22089, dated 13-3-1951.

Electric Grid Offices

This is to confirm that Shri V.R.Vaidya, Superintending Engineer(Transmission) left for New Delhi by Meerut Express on Monday 12th March 1951, for discussions with the officers of the D.G., S. & D., in connection with 110 kV transmission line materials for Jog-Karnatak Electric Grid Scheme. The tenders were returned to the D.G., S. & D., by registered post on 9-3-1951.

T.S. Nucleus 17.3.51.

The Secy. to Govt.,
P.W.D., Bombay.

U.O.R.,No.T.8/S-3/ 7709
Bombay, 19 March 1951.

ARK.16.3.51.

2004/36
25091

P.W.D.

P.W.D. (I).

Regional

421
7/4/87

F.T.
9/4

2004/36

25091

Telegrams: "CHAMBER" Telephone: 102.

KARNATAK CHAMBER OF COMMERCE
ಕರ್ನಾಟಕ ಚೇಂಬರ ಆಫ್ ಕಾಮರ್ಸ (ವಣಿಕ್ ಸಂಘ) ಹುಬ್ಬಳ್ಳಿ.

No. H-6/198 HUBLI 14th Mch. 1951.

To The Electrical Commissioner -
with Government,
Electric Grid Offices,
Foreshore Road, F-Bombay,1.

Sub: Progress of the execution
of the Jog-Project.

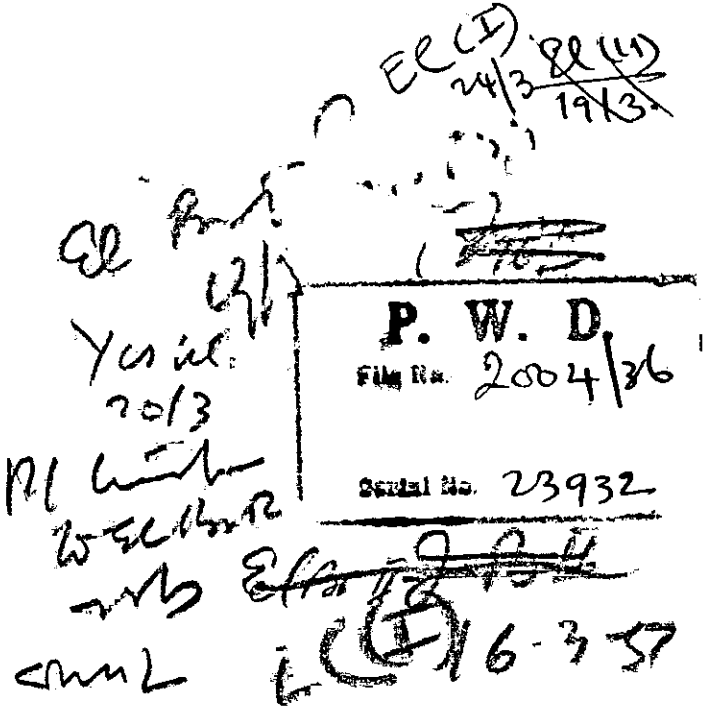
Sir;

We have to request you kindly to inform the progress made in the execution of the Jog-Project and also the programme, in broad outlines, for the financial year 1951-52.

Yours faithfully,
R. K. [illegible]
Hony.Secretary.

C.W.Cs to:-

The Secretary to Government -
Public Works Department(Irrigation),
Secretariat, Bombay.


P. W. D.
File No. 2004/36
Serial No. 23932

No.T.3/10 8372
Electric Grid Offices,
Mercantile Bank Building, Fort,
Bombay,1. 26 March, 1951.

To

The Honorary Secretary,
Karnatak Chamber of Commerce,
Hubli.

Subject:-Jog-Karnatak Electric Grid Scheme
Progress of Works.

Reference:-Your No. H-6/198
dated 14-3-1951.

Dear Sir,

Most of the designs, preparation of specification and inviting tenders for sub-station equipment and Transmission line materials required for the Scheme is completed. Surveys are in full swing and are expected to be completed before the coming Monsoon. Orders for the complete sub-station equipment required for the Scheme have already been placed. Orders for Transmission line materials are expected to be placed very shortly. Tenders for the lower voltage, i.e. 33 kV and 11 kV lines are being invited.

In the coming financial year 1951-52, the execution of Civil Engineering Works will be taken in hand. Other works will be taken up as the materials arrive.

Yours faithfully,

V.R.Landya

Superintending Engineer
(Transmission)
for Chief Engineer,

Copy forwarded with compliments to the Secretary to Government, Public Works Department, Bombay, for information.

DPD.25/3/51

2004/36/23932 and 27180

El. Br (I) P.W.D.

Submitted for information.

2/- The papers deal with a correspondence between the Hon. Secy., Karnatak Chamber of Commerce, Hubli & the C.E., Bombay Elec. Grid regarding progress of the execution of the Tog-Project. No action is necessary.

Record.

12/4/17

13/4/17

DS

F.C.

Ghataprabha Left Bank Canal

SCHEME

The Ghataparabha Valley Development Scheme contemplates development of the water resources of the Ghataprabha Valley for purposes of irrigation and comprises of

(a) Ghataprabha Left Bank Canal which will be a monsoon canal of 1500 cusecs capacity taking off the existing weir at Dhupdal to command 4.5 lacs of acres on the left bank of the Ghataprabha and right bank of the Krishna river.

(b) A storage of about 30,000 M.cft.storage to make the Ghataprabha Left Bank Canal and an 8 months or perennial one.

and (c) A second storage of about 30,000 M.cft. and Ghataprabha Right Bank Canal to command about 8.5 lacs of acres on the right bank of the Ghataprabha.

The total cost of the whole scheme will be about Rs. 30 crores of rupees.

STAGE DEVELOPMENT

However, the scheme lends itself to gradual development in different stages. The first stage as now sanctioned consists of Ghataprabha Left Bank Canal taking off from the existing weir at Dhupdal and extending from mile 1 to 44 with two branches aggregating toalength of 31 miles. The area commanded by this length of canal is 2.5 lacs of acres of which 1.2 lacs of acres will be irrigated in Kharif. The cost will be Rs. 5½ crores.

The Contractors having quoted very high rates, the work was started in June 1949 on piece work system which has proved to be both speedy and economical. The work was taken up upto mile 38 wherever labour was available in large numbers but as funds available were too little compared to the requirements, the work in the lower reaches had to be curtailed. At the moment, the work in the first 8 miles is receiving the highest priority as it is proposed to issue water for irrigation in June 1951. It was proposed to irrigate 30,000 acres upto mile 20 in June 1952 but this will be possible only if adequate funds are made available early in 1951-52. Irrigation of 60,000 acres will be possible in 1952-53 if necessary funds are granted in 1951-52 and 1952-53. The original programme contempated irrigation of 1,20,000 acres in June 1954 and if followed, capital will be progressively remunerative as it is invested. In short, the speed of stage development is entirely dependent in this case on sufficient funds being made available, and the capacity of the Division for realising the programme is restricted by finance only.

WORK DONE

About 25% of the work has been done so far and the expenditure that will be incurred upto the end of...

of 1950-51 on this work will be Rs. 1 crore but as adequate funds were not available during the current year and are not provided for the next year, the progress of the work had to be mercilessly curtailed and the momentum gained so far practically lost. The maximum daily labour that was working on the canal was 9000 but it is now hardly 4000 strong and will have to be further curtailed in April 1951.

BENEFITS.

This is the only work of major irrigation in the Karnatak and when completed will entirely change the face of the dry and scarcity stricken land in the Belgaum and Bijapur Districts through which this canal will flow. As such, its progress is keenly watched by the whole of the Karnatak. A list of villages and the extent of areas which will receive advantage of irrigation by the first stage of the scheme is enclosed. This is a prominent effort towards food and fodder drive in the Karnatak area. The area that will be irrigated out of a command of 2.5 lacs of acres, will be 1.2 lacs of acres and the annual increase in food production will be 36,000 tons costing about Rs. 90,00,000/-. With the completion of further stages of the scheme industries pertaining to cotton, oil, sugar cane, etc., will be encouraged and material prosperity due to both direct and indirect benefits will be increased substantially in this poor area.

As mechanisation is limited and as the labour employed is mostly local, the major portion of the expenditure incurred will go to the pockets of the local villagers who will be doubly benefited. So far more than Rs. 60 lacs have thus been distributed among the local labour.

The existence of the smaller scheme viz., Gokak canal has proved the advantages of irrigation beyond doubt and the cultivators are extremely keen to have the scheme and have shown perfect cooperation in every respect e.g. although the work has spread out for about 38 miles not a single acre has been so far acquired but all the lands have been taken over merely by written consents which are readily forthcoming.

Gokak 14/3

Superintending Engineer, K.I.C.

List of names of ~~x~~ villages in Belgaum & Bijapur Districts coming under the command of the Ghataprabha Left Bank Canal under constructi

Sl. No.	Name of Village.	Taluka	Prant.	District	Commanded area in acres.
		Main Canal.			
1.	Arbhavi	Gokak	Chikodi	Belgaum	4200
2	Badigwad	"	"	"	1940
3	Balobal	"	"	"	1600
4	Birangadi	"	"	"	1480
5.	Durdundi	"	"	"	1675
6	Ganeshwadi	"	"	"	1140
7	Handigund	"	"	"	1100
8.	Itnal	"	"	"	1425
9.	Hunshal.	"	"	"	2980
10.	Jagnur	"	"	"	665
11	Mallapur	"	"	"	645
12	Pamaldinni	"	"	"	1040
13	Rajapur	"	"	"	2870
14	Shindikurbet	"	"	"	840
15	Shingnapur	"	"	"	750
16.	Lolsur	"	"	"	900
17	Basrigundi.	"	"	"	985
18.	Nallanhatti	"	"	"	1195
19	Wadarhatti.	"	"	"	2775
20	Fulgaddi.	"	"	"	1550
21	Patgundi	"	"	"	3535
22	Dharmatti.	"	"	"	2110
23	Masguppi	"	"	"	3920 (including Jokanhatti & Gunjanhatti.).
24	Kalloli	"	"	"	8525 (including Tukanhatti).
25	Nagnur	"	"	"	5270
X ~~26~~	~~Itnal~~.	"	"	"	~~1425~~
27	Mudalgi	"	"	"	3770 (including Gurlapur).
28	Rangapur	"	"	"	805
29	Kamaldinni.	"	"	"	950
30	~~Макарик~~ Shivapur	"	"	"	3125

List of names of ~~x~~ villages in Belgaum & Bijapur Districts coming under the command of the Ghataprabha Left Bank Canal under constructi

Sl. No.	Name of Village.	Taluka	Prant.	District	Commanded area in acres.
		Main Canal.			
1.	Arbhavi	Gokak	Chikodi	Belgaum	4200
2	Badigwad	"	"	"	1940
3	Balobal	"	"	"	1600
4	Birangaudi	"	"	"	1480
5.	Durdundi	"	"	"	1675
6	Ganeshwadi	"	"	"	1140
7	Handigund	"	"	"	1100
8.	Itnal	"	"	"	1425
9.	Hunshal.	"	"	"	2980
10.	Jagnur	"	"	"	665
11	Mallapur	"	"	"	645
12	Pamaldinni	"	"	"	1040
13	Rajapur	"	"	"	2270
14	Shindikurbet	"	"	"	840
15	Shingnapur	"	"	"	750
16.	Lolsur	"	"	"	900
17	Basrigundi.	"	"	"	985
18.	Nallanhatti	"	"	"	1195
19	Wadarhatti	"	"	"	2775
20	Fulgaddi	"	"	"	1550
21	Patgundi	"	"	"	3535
22	Dharmatti.	"	"	"	2110
23	Masguppi	"	"	"	3920 (including Jokanhatti Gunjanhatti.).
24	Kalloli	"	"	"	8525 (including Tukanhatti
25	Nagnur.	"	"	"	5270
~~26~~	~~Itnal~~.	"	"	"	~~1425~~
27	Mudalgi	"	"	"	3770 (including Gurlapur)
28	Rangapur	"	"	"	805
29	Kamaldinni.	"	"	"	950
30	~~Макарик~~ Shivapur	"	"	"	3125

S. No.	Name of Village	Taluka	Prant	District.	Commanded area in acrs.
32	Marapur	Mudhol	Jamakhandi	Bijapur	1050
33	Dhavalwshwar	"	"	"	4635
34	Nandgaon	"	"	"	2760
35	Mahalingpur	"	"	"	880
36	Budi	"	"	"	1900
37	Sanganhatti	"	"	"	960
38	Bisnal	"	"	"	950
39	Kasarkop	"	"	"	1435
40	Nipnal	Not known			135
41	Sultanpur	"			195
42	Chimad	"			1280
4		North Branch.			
1.	Mugalkhod.	Raibag	Chikodi	Belgaum	4070
2	Hidkal	"	"	"	3010
3	Harugeri	"	"	"	8200
4	Yabarhatti.	"	"	"	1590
5	Shankarhatti	NotKnown			1960
6	Darur	Athani	Chikodi	Belgaum	4370
7	Koligud	Raybag	"	"	1880
8	Ingalgaon	Athani	"	"	2375
9	Thirth	not known			1500
10	Saptasager	Athani	Chikodi	Belgau,	1300 (inclusive of Mispathpur).
11	Siddapur	Raybag	"	"	1565
12	Khemlapur	"	"		3445 (inclusive of Yelparhatti.)
13	Dyakud	"	"	"	no map available hence area not supplied
14	Alkanur	"	"	"	3940
15	Shirbur	"	"	"	4300 Inclusive of parmanandwadi)
16.	Gandwad	"	"	"	900
17	Kudchi	"	"	"	9900

Sl. No.	Name of village	Taluka	Prant	Dist.	Commanded area in acres.
18	Nilaji	Raibag	Chikodi	Belgaum	2730(inclusive of Suthatti
19	Chinchali	"	"	"	3640
20	Bekkeri	"	"	"	2490
21	Jalalpur	"	"	"	1330
22	Bhiradi	"	"	"	2220
23	Digewadi(Jr.& Sr.)	"	"	"	1775
24	Saundatti	"	"	"	2680(inclusive of Wadi).
25.	Yadrav	"	"	"	630
26.	Raibag	"	"	"	1770(inclusive of Kachakar -wadi).
27.	Bamnal	"	"	"	180
28.	Nidgundi	"	"	"	860
29.	Alakwadi	"	"	"	570
30.	Morab	"	"	"	1920
31.	Kankanwadi	"	"	"	3140

JAMKHANDI BRANCH

1.	Alwal				
2.	Algur				
3.	Asangi				
4.	Aski				
5.	Banhatti				
6.	Golbhavi				
7.	Halingali				
8.	Kanchanur				
9.	Hosur				
10.	Hippargi				
11.	Hunnur				
12.	Jagdal				
13.	Jamkhandi				Area
14.	Kadpatti				under
15.	Kalhalli	Jamkahndi	Jamkhandi	Bijapur	command
16.	Kaltippi				55700
17.	Kankanwadi				acres.
18.	Kumbarhal				
19.	Korkal				
20.	Madarkhindi				
21.	Madanmatti				
22.	Mayagur				
23.	Muttur				
24.	Rabkavi				
25.	Rampur				
26.	Sanal				
27.	Shirguppi				
28.	Suslatti				
29	Tamaddi				
30	Terdal				
31.	Yelhatti				
32	Yergate				

A brief note on the Progress of Works of the
JOG KARNATAK ELECTRIC GRID SCHEME.

1. The Scheme and the Cost.

At a conference of the Hon'ble Ministers of the Bombay and Mysore Governments held at Bangalore on 10-2-1949, the Mysore Government agreed to supply electric power to the extent of 10,000 kW at Jog and 1,500 kW at Harihar for distribution in the Karnatak area of Bombay State. This quantum of power is insufficient for supplying the whole Karnatak and uneconomical to distribute. Therefore a proposal restricting the supply to nine industrial and rural townships of the North Kanara and Dharwar districts was prepared and submitted to Government by the Electric Grid Department. The towns to be supplied power are Sirsi, Hanagal (for rural distribution), Dandeli, Hubli, Gadag and Dharwar on the Jog Section and Ranibennur, Byadgi and Haveri on the Harihar section. About 1,000 kW are proposed to be distributed to rural agricultural and small industrial loads around Hanagal and Ranibennur-Byadgi areas. Most of the design work connected with the scheme has been completed. In the layout and design, provision has been made for future extensions of the scheme with the least additional costs, if and when Mysore Government spare more power from the Jog Power Station. Field work is in progress. Orders for some of the equipments are already placed and for others it is expected to be placed shortly. With a view of completing the scheme as early as possible orders are being placed with firms offering very short delivery periods, in spite of higher prices in some cases. According to the proposed programme of construction, power supply from this scheme is expected to commence in 1953-54.

The estimated capital cost of the scheme is about Rs.213 lakhs which includes about Rs.7 lakhs as capitalised interest during construction. The phasing of the expenditure year by year is approximately as follows :-

No.	Year.	Expected Expenditure in Rs.lakhs.
1	1950-51	0.30
2	1951-52	81.13
3	1952-53	78.19
4.	1953-54	38.24
5	1954-55	5.48
6	1955-56	2.74

2. ---

2. Advantages of the scheme.

The Karnatak area of the Bombay State is potentially rich in raw materials for the development of industries. But the area remains under-developed due to several causes one of which is the absence of cheap electric power; although the region itself contains a large source of undeveloped Hydroelectric power in Kalinadi. As an essential first step for development, the Jog Karnatak Electric Grid Scheme aims to supply electricity obtained in bulk from Mysore to some industrial and agricultural centres. Within its limited scope the scheme provides for the various power demands of the urban and rural areas. Besides the domestic needs, the types of load proposed to be catered by this scheme are Pulp & Paper Mills, Alumina Refining Plant , Textile and Oil Mills, Match Factory, Railway and other workshops, Small lift Irrigation Pumps, Flour and Rice Mills, Power Looms, etc. Although the quantum of power available for distribution is small, it is expected that it will give an impetus to the industrial growth of the territory and be the forerunner for the development of Kalinadi Hydro Electric Scheme.

3.Transmission Line Routes and Sub-stations.

The enclosed drawing No. J 241, shows the proposed transmission line routes and power receiving centres of the Scheme. They consist of a 110 kV double circuit line, with one circuit strung for the present, connecting the Mahatma Gandhi Power House at Jog with the main sub-stations at Hubli and Dandeli through a switching station at Kavalvad. Power from this line is tapped at Sirsi to meet the local and Hanagal (rural loads) demands. An 11 kV double circuit line connects Sirsi with Hanagal. From Hubli, power is proposed to be supplied to Gadag and Dharwar by 33 kV and 11 kV Single circuit lines respectively. Power available at Harihar is to be supplied to Ranibennur and Byadgi by a 33 kV single circuit line. From Byadgi there will be an 11 kV line feeding Haveri. Every substation is equipped with the necessary switchgear and

(where ---

(where required with) step-down transformers and equipment to supply power at 11 kV. The demand in Kilowatts at the various substations are noted below:

No.	Load Centre.	Maximum Demand in KW.
	Jog-Hubli Section.	
1	Sirsi	400
2.	Hanagal(Rural)	400
3.	Dandeli	4,100
4.	Hubli	3,600
5.	Gadag.	850
6.	Dharwar.	550
	Haribar -Haveri Section.	
7.	Ranibennur	650
8.	Byadgi	600
9.	Haveri	220

4. Probable Rates of Supply.

Average revenue from sale of power from different classes of users is estimated as follows :

Town Supply in Bulk at Substation	1.00 annas per unit
Rural Load.	2.00 Annas per unit
High Tension Supply to Industries.	0.4 to 0.9 anna per unit.

With the average rate of 1 anna per unit proposed for town supply at 11 kV, it should be possible for the Licensees at the different places to supply lighting and fan loads at about 5½ As. per unit and the small motive power loads at about 2 annas per unit, the supplies being at L.T. (230/400 volts.). Rural loads are also proposed to be distributed at about 2 annas per unit at L.T.(230/400 volts) supply. ~~Rural loads are also proposed to be distributed at about 2 annas per unit at L.T.(230/2~~ The rate for bulk supply for the larger industries will vary according to the load and load factor, the proposals for this scheme ranging from 0.4 to 0.9 annas per unit at H.T.(11 kV) supply. The above proposed rates are exclusive of the Government Electricity Duty.

5. Progress of Survey Work.

The survey work on the 110 kV and 33 kV line routes and substation sites is in full swing and is being carried out by

contract .---

97

contract. The work completed so far is as follows :-

No.	Line	Percentage work completed. Reconnaissance survey.	Detailed survey.
1	110 kV Transmission Line.	85 %	20 %
2	33 kV Transmission Line.	100 %	60 %

Survey of some of the substation sites have been completed. Every endeavour is being made to complete the detailed survey work before the coming Monsoon season.

6. Progress so far made on the project.:-

Most of the design, preparation of specifications and inviting tenders of the substation equipment and transmission line materials required for the scheme is completed. All the substation sites have been selected. Surveys are in progress. The distribution system for power supply to rural loads round about Hangagal and Ranibennur - Byadgi areas are being worked out. Work connected with civil engineering will be commenced as soon as the Executive Engineer, (Civil) and his staff are posted to Hubli.

The expenditure incurred on the capital outlay of the scheme so far is Rs. 30,000 and the amount provided for in the budget estimates for 1951-52 is Rs. 58 lakhs. The latter amount is likely to be increased to Rs. 81.13 lakhs for 1951-52 as mentioned in para 1 above in view of the final terms of payment which have been agreed upon with the manufacturers.

7. Progress regarding placing of orders.

Orders for complete substation equipment required for the scheme have been placed on 9.1.51. Orders for the transmission line materials are about to be placed through the Director General of Supplies & Disposals, New Delhi. Orders for other materials and equipment will be placed as and when necessary.

Encl: 1 Drawing.

isb/16.3.

17.3.51.

Note on Neersagar Water Supply Scheme.

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1. General - The towns of Dharwar and Hubli are in need of adequate drinking water supply since long. The Municipalities are, however, not in a position to finance the Water Supply Schemes. Government with a view to helping Municipalities assumed responsibility and sanctioned a joint water supply scheme in Government Resolution No.6250/36-III dated the 8-3-1948 at an estimated cost of Rs. 1,40,97,778/-.

2. Proposed Scheme - The Scheme will cater for a prospective population in 1975 of 80,000 persons in Dharwar and of 1,70,000 persons in Hubli. Water will be supplied at the rate of 30 gallons per head per day. The Scheme is designed to supply water at 8.5 million gallons per day including one million gallon for industrial consumption. The Scheme also envisages the irrigation of 1200 acres of land under its command.

3. It is proposed to build an earthen dam about 3800 feet long and 75 feet high to store 1021 mcft. of water on the Bedati Nalla near the village Neersagar. From this storage, water will be taken to a raw water pump on the down stream of the dam through 30 inches diameter supply main. The raw water will then be pumped through 27 inches dia. rising main to the purification works to be located on the raised plateau at Kawihanapur which is a mile 7/1 of Dharwar-Kalghatgi Road. Here raw water will be allowed first to settle down in floculator and clarifier. It will then be passed to rapid sand filters and will be stored in pure water sump. This filtered water will flow by gravity to Hubli through 24 inches main and will be pumped into the proposed reservoir at Saraswat Colony, Dharwar through 12 inches pumping main - Water will be distributed to the public through Municipal mains.

4. Tenders for the earthen dam and its allied works received by Govt. had to be rejected owing to their high cost. Govt. has now decided to carry out the work departmentally and orders for Euclid loader and dumping unit machinery.....

machinery were accordingly placed on the D.G.I.& S., New Delhi, but it has ~~xxxx~~ since been decided to go in for tractor scraper unit machinery.

5. The Scheme is in full swing, the expenditure incurred upto March 1951 being Rs. 48,75,238/-. A provision of Rs. 25.92 lakhs has been made in the next year's budget and the scheme is expected to be completed in March 1954.

4
VMW.
19/3/51.

E—2

2004/36

P. W. D.

El.Br.(I).

H.M., P.W.D., desires that a brief note covering the following points re: the Jog-Karnatak Electric Grid Scheme should be furnished to Karnatak M.L.As. with the least possible delay:

(1) Brief description of the scheme indicating estimated cost and phasing of expenditure.

(2) Advantages of the scheme.

(3) Routes of transmission and distribution lines, places of substations and different centres at which power is to be made available, supported by an index plan.

(4) The probable rates for the supply of power for
(a) lighting and fans
(b) motive power, and
(c) bulk supply.

(5) Progress of the survey work already done and what remains to be done.

(6) Progress so far made on the Project indicating the expenditure incurred so far and the amount provided for in the budget estimates for 1951-52

(7) Progress regarding the placing of orders for plant and equipment.

2. The Chief Engineer, Bombay Electric Grid, may be requested to submit the above note (~~in triplicate~~) by the 20th March 1951 at the latest.

OFFICE OF THE
ELECTRICAL COMMISSIONER TO
THE GOVERNMENT OF BOMBAY
Inward No. 6989
Date 12/3

2
GJP.
10/3/51

421
10/3/51.

D.S.

He may be requested to forward a Tracing of the index plan so that the required number of blue print copies can be taken out here.

10/3/51

Immediate

C.E. Bombay Electric Grid, 12-3-51

Below U.O.R.P.W.D.No.2004/36 dated 12-3-51.

*****

ELECTRIC GRID OFFICES.

I submit herewith a brief note (in duplicate) on the Jog-Karnatak Electric Grid scheme covering all the points mentioned in the U.O.R. As requested I am sending the original tracing of drawing No. J 241 together with a blue print of the same showing the transmission lines and sub-stations marked with different colours. After the necessary number of prints are taken the tracing may be returned to this office.

Encl (i) Note in duplicate
(ii) One tracing.
(iii) One blue print.

T. J. Mahadevan
17.3.51.

The Secretary to Government,
Public Works Department,
Bombay 1:

U.O.R. No. T8/1/7690
Bombay 1: March 1951.

ISB/16.3.

D.O.No. Gh.L.B
Office of the Superintending Engr.,
Karnatak Irrigation Circle,
Dharwar, 16th March 1951.

Dear Joglekar

In compliance with your telephone message, I am enclosing a note on the Ghataprabha Left Bank Canal with spare copies.

Yours sincerely,

(A.G.Naik)

Encl.
Note with plan.

Spare copies of the note & plan are retained in the office.

To

Shri. K.V.Joglekar,
B.E.,B.S.E(I),
Deputy Secretary to Govt.,
Public Works Department,
Secretariat, Bombay.

P.W.D.

H.M. discussed the question of raising local loan of Rs. one crore for executing the following three major schemes in Karnatak expeditiously, with M.L.As. from Karnatak in the first week of March:-

(1) Ghatprabha Left Bank Canal Project.

(2) Jog-Karnatak Electric Grid Scheme.

(3) Neersagar Water Supply Scheme for Dharwar and Hubli.

The M.L.As. desired that they may be supplied with brief particulars, supported by plans, of the schemes to enable them to contact the people concerned in this connection and ascertain their reaction, to the proposal of the local loan.

2. Three notes and plans on these schemes are placed below. After they are approved, they will be forwarded to Shri Prabhu, Parliamentary Secy. to H.M., P.W.D., for onward transmission to the M.L.As. As desired by Shri Prabhu, he will be supplied with 25 copies of each of the notes and 4 copies of each of the plans.

DRN.
19.3.51.

2.0064/3

~~Ele. Br (I).~~ P.W.D

Resubmitted

2. 25 copies of each of the notes mentioned in para 1 of the Dy. Secy's note overleaf and 4 copies of the two plans* are submitted for further action with reference to para 2 of the Dy. Secy's note.

*(1) Routes of transmission lines of the Jog Kamataka electric grid scheme.

(2) Index map of the Bhadra Valley Development Scheme.

21/3/37.

H/21/3/37 D.S

I have handed over the P.S. to H.M. P.W.D. copies to Mr. R.S. Hukkerikar requesting him to distribute the same among the members interested and to make any other proper use of the same. Highly grateful for supplying the copies promptly.

Bombay.
24/3.

H/24/3

113 ~~33~~ 2W 4/36

V. urgent

E(.Br (I) P.W.D

D.y secy has desired that 5 extra blue prints of the tracing attached should be taken out very urgently. The Draftsman will please do so

R.D. on 24/3/61 at 11.15 A.M. 23/3/61

To the Draftsman P.T.O.

3/4

6 B. Prints are taken & will be supplied on Monday 26th March 1957. Original Tracing on cloth is returned herewith M.

Phogrekar

Supplied herewith M.

24/3/57

26/3/57

27/3

Note

Tracing returned by Li D.O. dt 3-4-57

3/4

1·5 — 2004/36

(Only this sheet [illegible])

Gl. B_1 (I) — P.W.D

The attached tracing received with the C.E., B'bay Gl. Grid's [illegible] No 8/1/7690, dt. the 17-3-195[illegible] is returned herewith

31/3/51 — 3/4

to C.E. Bbay Gl. Grid as

A.A.S. 6-4-51

+ with tracing.

") Below Govt.U.O.R., P.W.D.No.2004/36 dated 6.4.1951.

ELECTRIC GRID OFFICES.

The tracing received with the U.O.R. under reference is received and retained in this office.

10-4-51

Secy. to Govt.,

P.W.D., Bombay.

U.O.R.No.T.8/1/ 1014.

Dated April 1951.

MAK/9.4.

2004/36
31727

28

K.B.

P.W.D.

Submitted with reference to the O.N. dt.
the 6-4-1951.

Record

21/4/51

11/4/51

A.A.S,
F/h

P. W. D.
File No. 2004/36
Dy. No. 31727

11-4-51